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Radar/Laser Detectors

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Accessories

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Cobra

9 band

Operating Instructions

9 BAND®
RADAR/LASER DETECTOR WITH EXTRA SENSORY DETECTION

ESD 7400

Printed in China
Part No. 480-529-P
Version A

Nothing Comes Close to a Cobra® English

Introduction

Important Information And Customer Assistance

Important Information

Federal Laws Governing The Use Of Radar Detectors

It is not against federal law to receive radar transmissions with your Cobra radar/laser detector. The Communications Act of 1934 guarantees your right to receive radio transmissions on any frequency. Local laws that contravene this Act, while illegal, may be enforced by your local law enforcement officials until and unless they are prohibited from doing so by federal court action.

Safety Alert

Use of this product is not intended to, and does not, ensure that motorists or passengers will not be involved in traffic accidents. It is only intended to alert the motorist that an emergency vehicle equipped with a Cobra Safety Alert transmitter is within range as defined by that product. Please call local fire and police departments to learn if coverage exists in your area.

Safe Driving

Motorists, as well as operators of emergency or service vehicles, are expected to exercise all due caution while using this product, and to obey all applicable traffic laws.

Security Of Your Vehicle

Before leaving your vehicle, always remember to conceal your radar detector in order to reduce the possibility of break-in and theft.

Customer Assistance

Customer Assistance

Should you encounter any problems with this product, or not understand its many features, please refer to this owner's manual. If you require further assistance after reading this manual, Cobra Electronics offers the following customer assistance services:

For Assistance in the U.S.A.

Automated Help Desk English only. 24 hours a day, 7 days a week 773-889-3087 (phone).

Customer Assistance Operators English and Spanish. 8:00 a.m. to 6:00 p.m. Central Time Mon. through Fri. (except holidays) 773-889-3087 (phone).

Questions English and Spanish. Faxes can be received at 773-622-2269 (fax).

Technical Assistance English only. www.cobra.com (on-line: Frequently Asked Questions). English and Spanish. product info@cobra.com (e-mail).

For Assistance Outside the U.S.A.
Contact Your Local Dealer

©2008 Cobra Electronics Corporation
6500 West Cortland Street
Chicago, Illinois 60707 USA
www.cobra.com

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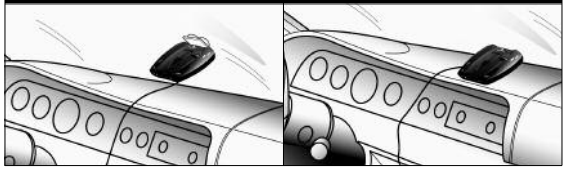
Installation

Where To Mount Your Unit

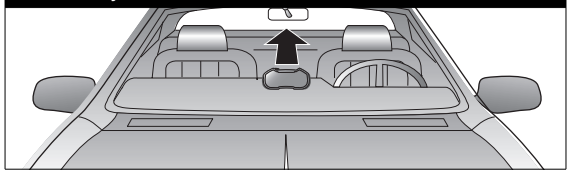
You will get optimum performance from your detector if you **Mount** it at a point approximately in the center of the vehicle, as low as possible on the front windshield without obstructing the unit's view of the road either to the front or rear. You can also mount it directly on the dashboard.

Windshield Mounting **Dashboard Mounting**



The unit's lens must not be blocked and the LaserEye should have a clear view out the back window to allow 360° detection.

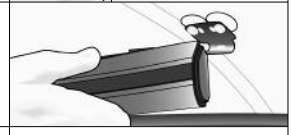
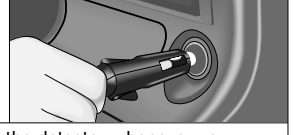
The LaserEye Should Have A Clear View



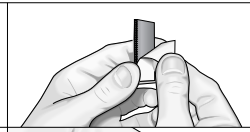
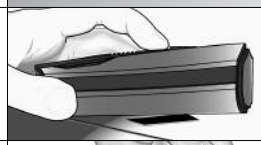
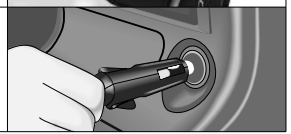
Radar and laser signals pass through glass but not through other materials and objects. Objects that can block or weaken incoming signals include:

- Windshield wiper blades
- Mirrored sun screens
- Dark tinting at the top of the windshield
- Heated windshields currently available on some vehicles (Instaclear for Ford, Electriclear for GM.) Consult your dealer to see if you have this option.

Windshield Mounting

1. Attach the rubber cups to the bracket.	
2. Make sure the rubber cups and your windshield are clean.	
3. Push the bracket firmly onto the windshield.	
4. Attach the detector to the bracket. Check the angle of the unit.	
5. To adjust the angle if necessary, gently push or pull on the bracket to bend it. DO NOT use the detector to bend the bracket.	
6. Plug the power cord into the detector.	
7. Plug the cigarette lighter adapter on the power cord into your vehicle's cigarette lighter.	
8. You can temporarily remove the detector whenever you wish by depressing the bracket release button and sliding it off the bracket.	

Dashboard Mounting

1. Place the detector on the dashboard to find a location where the unit has a clear, level view of the road. The angle can NOT be adjusted after mounting.	
2. Remove the paper backing from one (1) side of the hook-and-loop fastener.	
3. Attach the pad to the dashboard at your chosen location and remove the other paper backing.	
4. Attach the detector to the hook-and-loop fastener. You can remove and reattach the unit as often as you like.	
6. Plug the power cord into the detector.	
7. Plug the cigarette lighter adapter on the power cord into your vehicle's cigarette lighter.	

Getting Started

To Turn On The Unit And Adjust The Audio Volume

	Tone	Visual Display
Rotate the **On-Off/ Volume** control clockwise (away from you).	Three (3) beeps	The power indicator will light up in the display indicating that the power is **On**.

NOTE
In some vehicles, power is supplied to the cigarette lighter even while the ignition is **Off**. If this is the case with your vehicle, you should turn **Off** or unplug your detector when parking for lengthy periods.

Settings

When changing the **Settings** on your detector, please keep in mind:

- Each time the unit is turned **On** the factory settings of **Highway** and **Auto Mute-On** will be set. They can be changed while the unit is in use as described in the following sections.

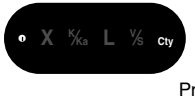
Highway/City Mode

Setting your detector to **City** mode delays all X band audio alerts at lower signal strength levels. (A single beep will sound when the signal is first detected.) This will reduce false alerts while you are driving in, or near, urban areas where there are many sources for conflicting X band signals such as microwave towers and automatic door openers.

To change settings, follow the procedure listed below, which indicates what you will see and hear as you complete each step. The factory setting is **Highway** mode.

Highway Mode

City Mode



City Button
Press and release

To Change From Highway Mode To City Mode		
Press and release the **City** button.	**Tone**	**Visual Display**
	One (1) beep	**Cty** appears in the display

To Change From City Mode Back To Highway Mode		
Press and release the **City** button again.	**Tone**	**Visual Display**
	Two (2) beeps	**Cty** off

Muting An Alert

Your detector allows you to quickly turn **Off** an audio **Alert** by momentarily pressing the **Mute** button. If you press the **Mute** button a second time during the **Alert**, the audio **Alert** will be turned back **On**.

Auto Mute Mode

Auto Mute will automatically reduce the audio volume of all alerts after four (4) seconds for as long as the signal is detected. The factory setting for **Auto Mute** is **On**.

Mute Button
Press and release

To Turn Auto Mute Off		
Press and release the **Mute** button while no alert is occurring.	**Tone**	**Visual Display**
	One (1) beep	None

To Turn Auto Mute On		
Press and release the **Mute** button again while no alert is occurring.	**Tone**	**Visual Display**
	Two (2) beeps	None

Detection

Signals Detected

The tables on the following pages show you the types of **Signals** your detector will detect, as well as the visual alerts it provides for each of them.

Audio Alerts

A distinctly different **Alert** tone is used for each type of signal detected (including separate tones for each laser signal). For X, K and Ka band radar signals, the tones will repeat faster as you approach the signal source. The repeat rate of the tones gives you useful information about the signal detected. (See responding to alerts on page 11.)

Visual Display

An indication of the type of signal detected will appear in the UltraBright data **Display**.

During radar alerts the letters **X** or **K/Ka** will appear.

X Signal Detected

K Signal Detected

Ka Signal Detected

During laser alerts the letter **L** will appear.

Laser Signal Detected

During VG-2 and Safety Alerts, the letters **V/S** will appear.

VG-2 Alert Signal Detected

Safety Alert Signal Detected

Radar Signals And Visual Displays

Type of Signal	Visual Display
X Band Radar	**X** is Steady
K Band Radar	**K/Ka** is Steady
Ka Band Radar	**K/Ka** is Steady

X Signal Detected

K Signal Detected

Ka Signal Detected

Laser Signals And Visual Displays

Type of Signal	Visual Display
LTI 20-20*	**L** is Steady
LTI Ultra-Lyte*	**L** is Steady
Kustom Signals ProLaser*	**L** is Steady
Kustom Signals ProLaser III*	**L** is Steady

* Your detector provides 360° detection of these signals.

Laser Signal Detected

Safety Alert Signals And Visual Displays

Type of Signal	Visual Display
Emergency Vehicles	K/Ka is Steady
Road Hazards	K/Ka is Steady
Trains	K/Ka is Steady

Safety Alert Signal Detected

VG-2 Alert Signal And Visual Display

Type of Signal	Visual Display
Interceptor VG-2	K/Ka is Steady

VG-2 Alert Signal Detected

Instant-On Detection

Your detector is designed to detect **Instant-On** speed monitoring signals, which can suddenly appear at full strength.

NOTE
You should take appropriate action immediately whenever an instant-on alert is given.

Responding To Alerts

Description	Interpretation	Recommended Response
Tone repeats slowly at first, then speeds up rapidly.	Probably police radar	FULL ALERT
Tone sounds one (1) time only.	Probably a false alarm, but possibly pulsed radar or VG-2 nearby	Exercise caution
Tone instantly begins repeating rapidly.	Radar or VG-2 nearby has been activated suddenly	FULL ALERT
Tone repeats slowly as you approach a hill or bridge, then speeds up sharply as you reach it.	Probably police radar beyond the hill or bridge	FULL ALERT
Tone repeats slowly for a short period.	Probably a false alarm	Exercise caution
Any type of laser alert.	Laser alerts are never false alarms	FULL ALERT
Any Safety Alert.	You are nearing an emergency vehicle, railroad crossing, or road hazard (construction, accident, etc.)	Exercise caution

Understanding Radar And Laser

Radar Speed Monitoring Systems

Three (3) band frequencies have been approved by the Federal Communications Commission (FCC) for use by speed monitoring radar equipment:

X band	10.525 GHz
K band	24.150 GHz
Ka band	33.400 – 36.00 GHz

Your detector detects signals in all three (3) radar bands.

VG-2

VG-2 is a "detector detector" that works by detecting low-level signals emitted by most radar detectors. Your detector does not emit signals that can be detected by VG-2, but does detect VG-2 signals and will alert you when a device is in use near your vehicle.

Safety Alert® Traffic Warning System

FCC-approved **Safety Alert** transmitters emit microwave radar signals that indicate the presence of a safety-related concern. Depending on the frequency of the signal emitted, it can indicate a speeding emergency vehicle or train, or a stationary road hazard.

Because these microwave signals are within the K band frequency, most conventional radar detectors will detect Safety Alert signals as standard K band radar. Your detector, however, is designed to differentiate between standard K band and Safety Alert signals, and give separate alerts for each.

Safety Alert technology is relatively new. Safety Alert transmitters can be found in limited numbers in all 50 states, but the number is growing. Depending on your location, you may not receive these alerts regularly and may often encounter emergency vehicles, trains and road hazards without being alerted. As the number of transmitters increases, these alerts will become more common.

When you receive such an alert, please watch for emergency vehicles ahead of you, on cross streets and behind you. If you see an emergency vehicle approaching, please pull over to the right side of the road and allow it to pass.

Your Detector Understanding Radar And Laser

LIDAR (Laser)

The correct name for the technology that most people refer to as laser is actually **LIDAR**, which stands for Light Detection and Ranging.

LIDAR operates much like radar. Its signal spreads out like a radar signal, though not as widely. Unlike radar, LIDAR must have a clear line of sight to its target vehicle throughout the entire measurement interval. Obstructions such as sign posts, utility poles, tree branches, etc., will prevent valid speed measurement.

Some common questions about LIDAR include:

- **Does weather have any affect on LIDAR?**
  Yes. Rain, snow, smoke, fog, or airborne dust particles will reduce the effective range of LIDAR and can, if dense enough, prevent its operation.
- **Can LIDAR operate through glass?**
  Yes. Newer LIDAR guns can obtain readings through most types of glass. However, the laser pulse also can be received through glass to trigger an alarm by your detector.
- **Can LIDAR operate while in motion?**
  No. Because LIDAR operates by line of sight, the person using it cannot drive the vehicle, aim and operate the gun all at the same time.
- **Is LIDAR legal to use?**
  Yes. It is legal in all 50 states.

Maintenance

Maintenance Of Your Radar Detector

Your detector is designed and built to give you years of trouble-free performance without the need for service. No routine **Maintenance** is required.

If your unit does not appear to be operating properly, please follow these troubleshooting steps:

- Make sure the power cord is properly connected.
- Make sure the socket of your vehicle's cigarette lighter is clean and free of corrosion.
- Make sure the power cord's cigarette lighter adapter is firmly seated in your cigarette lighter.
- Check the power cord fuse. (Unscrew the ribbed end cap of the cigarette lighter adapter and examine the fuse. If required, replace it with a 2-amp fuse only.)

Specifications

Band And Frequencies

Band	Frequencies		
X Band	10.525	± 0.050	GHz
K Band	24.125	± 0.125	GHz
Safety Alert	24.070	± 0.010	GHz
Traffic Warning	24.110	± 0.010	GHz
System	24.190	± 0.010	GHz
	24.230	± 0.010	GHz
Ka Band	34.700	± 1.300	GHz
Laser	910	± 50	nm

Unit Dimensions And Weight

Dimensions*	Weight*
1¼" x 2¾" x 3⅜"	4.26 oz.
(33 mm x 70 mm x 98 mm)	(121 g)

* Dimensions and weight measurements are approximate.

This radar detector is covered by one or more of the following U.S. patents: 5,497,148; 5,594,432; 5,612,685; 6,078,279; 6,094,148. Additional patents may be listed inside the product or pending.

Limited 1-Year Warranty

For Products Purchased In The U.S.A.

Cobra Electronics Corporation warrants that its Cobra 9 Band Radar/Laser Detectors, and the component parts thereof, will be free of defects in workmanship and materials for period of one (1) year from the date of first consumer purchase. This warranty may be enforced by the first consumer purchaser, provided that the product is utilized within the U.S.A.

Cobra will, without charge, repair or replace, at its option, defective 9 Band Radar/Laser Detectors, products or component parts upon delivery to the Cobra Factory Service Department, accompanied by proof of the date of first consumer purchase, such as a duplicated copy of a sales receipt.

You must pay any initial shipping charges required to ship the product for warranty service, but the return charges will be at Cobra's expense, if the product is repaired or replaced under warranty.

This warranty gives you specific rights, and you may also have other rights which vary from state to state.

Exclusions: This limited warranty does not apply: 1) To any product damaged by accident. **2)** In the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs. **3)** If the serial number has been altered, defaced or removed. **4)** If the owner of the product resides outside the U.S.A.

All implied warranties, including warranties of merchantability and fitness for a particular purpose are limited in duration to the length of this warranty.

Cobra shall not be liable for any incidental, consequential or other damages; including, without limitation, damages resulting from loss of use or cost of installation.

Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

Product Service

If you have any questions about operation or installing your new Cobra product, or if you are missing parts…

Please call Cobra first! DO NOT RETURN THIS PRODUCT TO THE STORE!
See customer assistance on page A1.

If you suspect that your unit requires service, please call 773-889-3087 BEFORE shipping it to Cobra. This will ensure that you receive service as quickly as possible.

If you are asked to send your unit to the Cobra factory, please follow these steps: **1)** Send the complete unit, including power cord. (It is not necessary to include the mounting bracket.) **2)** For warranty repair, enclose some form of proof-of-purchase, such as a photocopy or carbon copy of a sales receipt. If you send the original receipt, it cannot be returned. **3)** Enclose a typed or clearly written description of the problem you are having with your unit, plus the name and address where you want the unit returned. **4)** Pack the unit securely to prevent damage during transit. If possible, use the original packing materials. **5)** Ship prepaid and insured using a traceable carrier such as United Parcel Service (UPS), Federal Express, or Priority mail with delivery confirmation. Ship to: Cobra Factory Service, Cobra Electronics Corporation, 6500 West Cortland Street, Chicago, IL 60707 U.S.A. **6)** Please allow three (3) to four (4) weeks before contacting us about the status of your service. Call 773-889-3087 for assistance. If your unit is under warranty, it will either be repaired or replaced upon receipt, depending on the model. If your unit is out of warranty, you will receive a letter informing you of the repair or replacement charge.

Trademark Acknowledgement And Optional Accessories

Trademark Acknowledgement

Cobra®, 9 Band®, DigiView®, Extra Sensory Detection®, HighGear®, EasySet®, IntelliMute®, IntelliShield®, microTALK®, LaserEye®, Safety Alert® Traffic Warning System, Strobe Alert®, VG-2 Alert®, Nothing Comes Close to a Cobra® and the snake design are registered trademarks of Cobra Electronics Corporation.

Cobra Electronics Corporation™, SmartPower™, Spectre Alert™, UltraBright™ and Voice Alert™ are trademarks of Cobra Electronics Corporation.

Opticom™ is a trademark of 3M Corporation. Instaclear® for Ford is a registered trademark of Ford Motor Company, Inc. Electriclear® for GM is a registered trademark of General Motors Corporation. 20-20™ and Ultra-Lyte™ are trademarks of Laser Technology, Inc. ProLaser™ and ProLaser III™ are trademarks of Kustom Signals, Inc. Bee III™ and Pop™ are a trademarks of MPH Industries. Spectre™ is a trademark of Stalcar. Interceptor VG-2™ is a trademark of TechniSonic Industries LTD. Tomar® is a registered trademark of TOMAR Electronics, Inc.

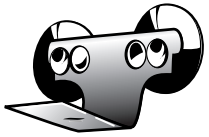
Optional Accessories

You can find quality Cobra products and accessories at your local Cobra dealer, or in the U.S.A., you can order directly from Cobra.

Straight 12V DC Power Cord

Includes plug and fuse

Item # 420-030-N-001



Windshield Mounting Bracket

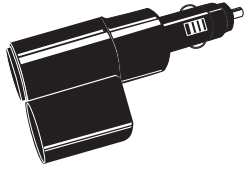
Includes suction cups

Item # 545-159-N-001

Coiled 12V DC Power Cord

Includes plug and fuse

Item # 420-026-N-001



Dual Port Power Adapter

Includes adjustable plug (up to 90˚) and fuse

Item # CLP-2B